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FIGURE 1 – PRIOR ART

100

Date Mailed Aug 14, 2000	Please bring entire bill if payment is made in person or return stub with your payment by mail.		
08 2910 0318 S	Total Amount Due \$15.97 Please Pay This Amount By 09/01/00		
081100BL 0168 035482 1 AV 0 243 MARLIN BARRERA 1257 W 41ST ST LOS ANGELES CA 90037-1705			
Your Account Number 076 405 8410 3 101 102 80 0764058410 00001597 37 0764058410 00001597 37 103 101 104 101			

FIGURE 2 – PRIOR ART

200

	Electric Company								
025104183313070169440494084148114									
<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 25%;">Account Number</th> <th style="width: 25%;">Service To</th> <th style="width: 25%;">Amount Due</th> <th style="width: 25%;">Amount Enclosed</th> </tr> </thead> <tbody> <tr> <td>HTC 71 69444-4</td> <td>08/09/00</td> <td>\$148.11</td> <td></td> </tr> </tbody> </table>		Account Number	Service To	Amount Due	Amount Enclosed	HTC 71 69444-4	08/09/00	\$148.11	
Account Number	Service To	Amount Due	Amount Enclosed						
HTC 71 69444-4	08/09/00	\$148.11							
H:1.3.327 1 AC 0.238 **C003 201 DIANE M LEWIS 3701 LIZ DR BAKERSFIELD CA 93312-2308 202 Box Sacramento, CA 95899-7300									
08/10 0x 251									
<i>Please return this portion with your payment. Thank you</i>									

FIGURE 3 – PRIOR ART

300

	Return This Section With Your Payment
	<input type="checkbox"/> YES! I want pipe protection at \$1.50 per month
	<input type="checkbox"/> Check for name address, phone corrections
22032107017	4500518
***** AUTOCR **C037 JAMES BARBERA 191 ERIAL RD PINE HILL, NJ 08021-4427	
P.O. Box Folsom, NJ 08037-6000	
301 Past Due After Aug 12 2000 Please Pay \$45.00	

FIGURE 4 – PRIOR ART

400

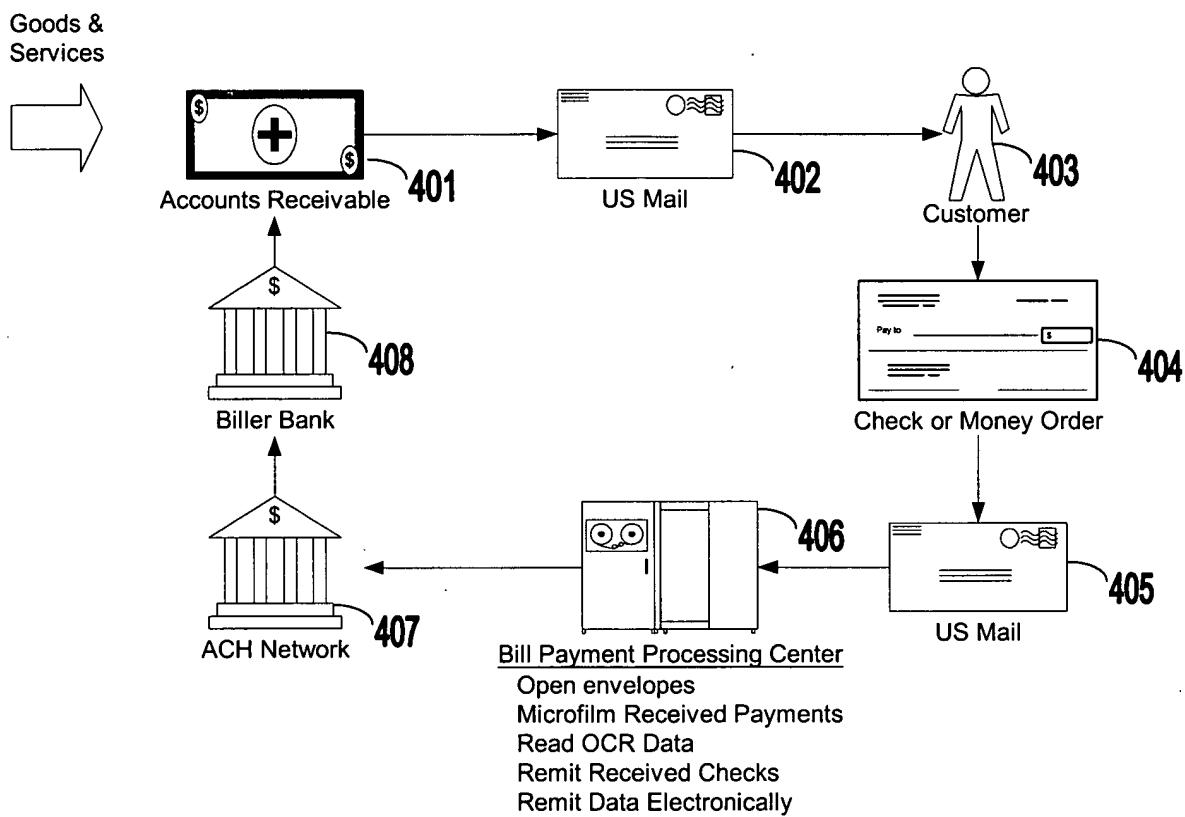
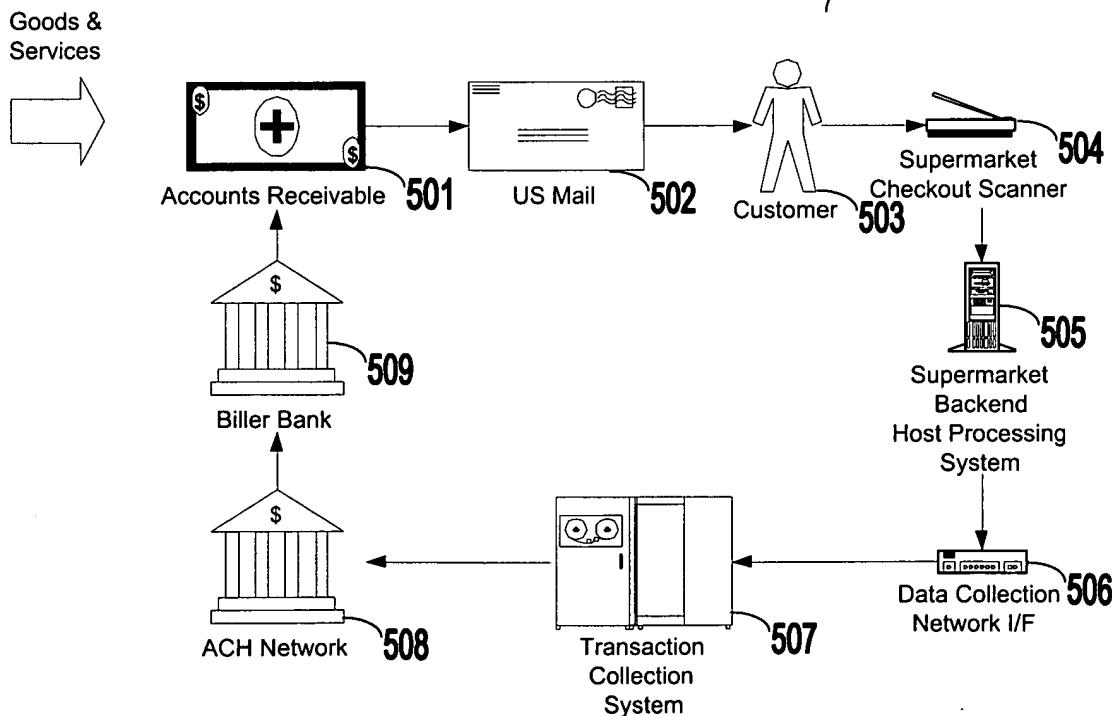


FIGURE 5

500



06232014 11:23 AM 400

FIGURE 6

600

- L1 Bar Code Symbology with Embedded Check Symbol 601
- L2 (fd) (.....data.....) (cd) 602
- L3 (fd) (.....data.....) (.....data.....) (cd) 603
- L4 (fd) (.....data....) (cd) (fd) (.....data....) (.....data....) (cd) 604
- ⋮
- Ln 605

FIGURE 7

700

- L1 Bar Code Symbology with Embedded Check Symbol
- L2 (.....data.....) (fd) (cd)
- L3 (.....data.....) (.....data.....) (fd) (cd)
- L4 (.....data....) (fd) (cd) (.....data....) (.....data....) (fd) (cd)
- ⋮
- Ln

FIGURE 8

LEVEL 1 ENVELOPE

800



1300017350764058410363

FIGURE 9

LEVEL 2 ENVELOPE

130001735076405841036 3

900

Digit	Weight	Digit*Weight	Sum of Digits	Running Sum
1	1	1	1	1
3	3	9	9	10
0	1	0	0	10
0	3	0	0	10
0	1	0	0	10
1	3	3	3	13
7	1	7	7	20
3	3	9	9	29
5	1	5	5	34
0	3	0	0	34
7	1	7	7	41
6	3	18	9	50
4	1	4	4	54
0	3	0	0	54
5	1	5	5	59
8	3	24	6	65
4	1	4	4	69
1	3	3	3	72
0	1	0	0	72
3	3	9	9	81
6	1	6	6	87
3				

00737014-321406

FIGURE 10

LEVEL 3 ENVELOPE

1000

Format Designator Value – 3

Example – 3 000173 5 0764058410 3 6

1 Digit Format Designator Value = 3 ← 1001
6 Digit Biller Identification Number ← 1002
1 Check Digit of preceding 6 digits using 371371 weights, MOD10 algorithm ← 1003
Number of Components (1 Fixed Length (7), 1 Variable Length) (By Definition) ← 1004
Customer Account Number with embedded (and known algorithm) check digit (3) ← 1005
Calculated check digit of Level 3 data using 2121... weights, Split MOD10 algorithm (6) ← 1006

FIGURE 11

LEVEL 3 ENVELOPE

1100

Format Designator Value – 4

Example – 3 000173 5 0764058410 3 4

1 Digit Format Designator Value = 4 ← 1101
6 Digit Biller Identification Number ← 1102
1 Check Digit of preceding 6 digits using 371371 weights, MOD10 algorithm ← 1103
Number of Components (1 Fixed Length (7), 1 Variable Length) (By Definition) ← 1104
Customer Account Number with added check digit to be discarded before presentation to biller (3) ← 1105
Calculated check digit of Level 3 data using 2121... weights, Split MOD10 algorithm (4) ← 1106

0220214 "TEST400"

FIGURE 12

VALID ACCOUNT NUMBER

Checkout Scanner

Retailer Host Processor

DCNI unit

- | | | |
|---------------|--|-------------------------------------|
| 1201 → | Read Bar Code → | |
| 1202 → | Validate Bar Code → | |
| 1203 → | | ← ACK, return Biller Name/Account # |
| 1204 → | ← Query Amount to be paid | |
| 1205 → | Amount → | |
| 1206 → | Bar Code + Amount → | |
| 1207 → | | Store Transaction Data |
| 1208 → | | ← ACK, return Transaction ID |
| 1209 → | ← Print Biller Name, Account #, Transaction ID | |

FIGURE 13

INVALID ACCOUNT NUMBER

Checkout Scanner

Retailer Host Processor

DCNI unit

- | | | |
|---------------|---------------------|---------------------------|
| 1301 → | Read Bar Code → | |
| 1302 → | Validate Bar Code → | |
| 1303 → | | ← NAK, return reason code |
| 1304 → | ← Reject Payment | |

FIGURE 14

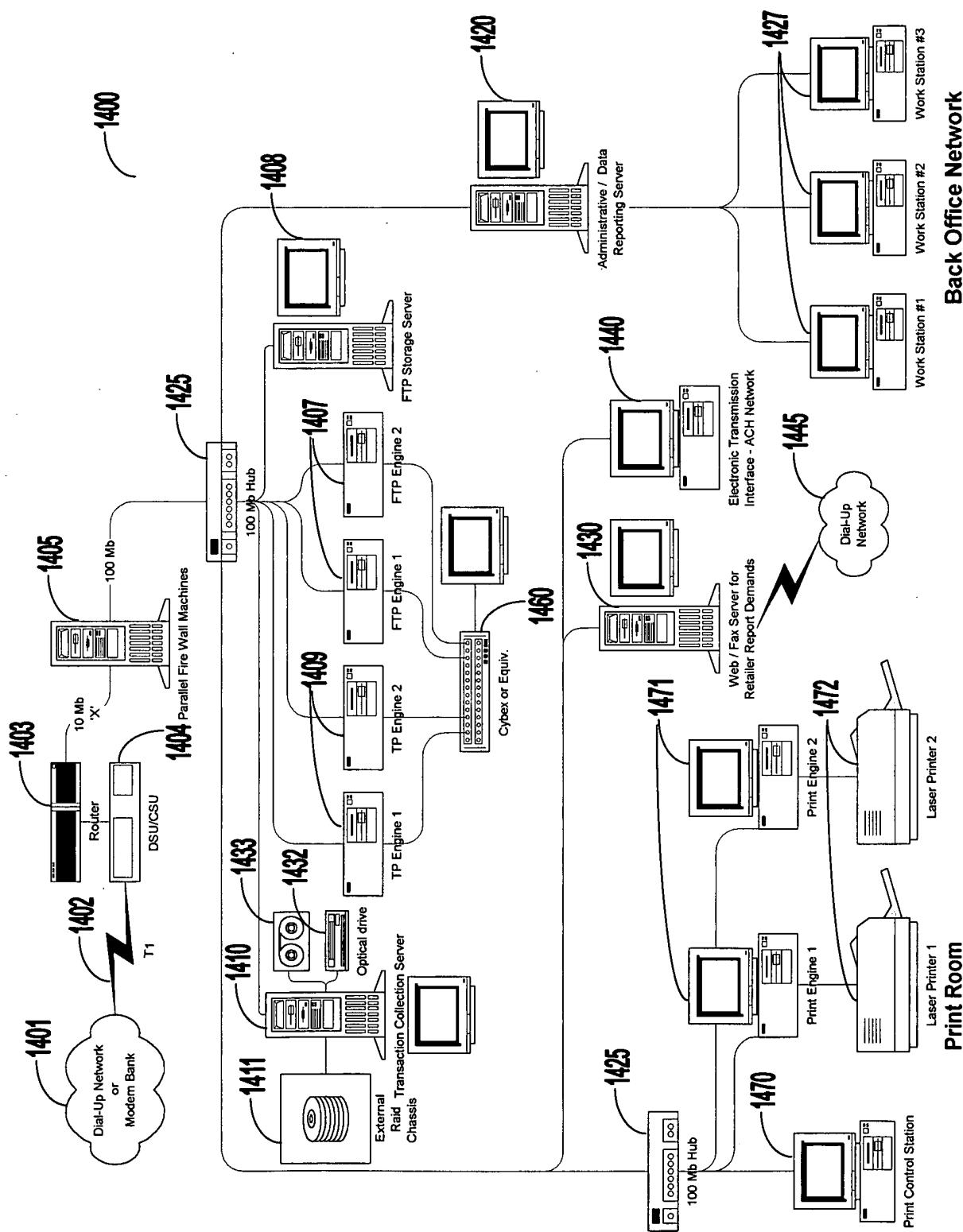


FIGURE 15

1500

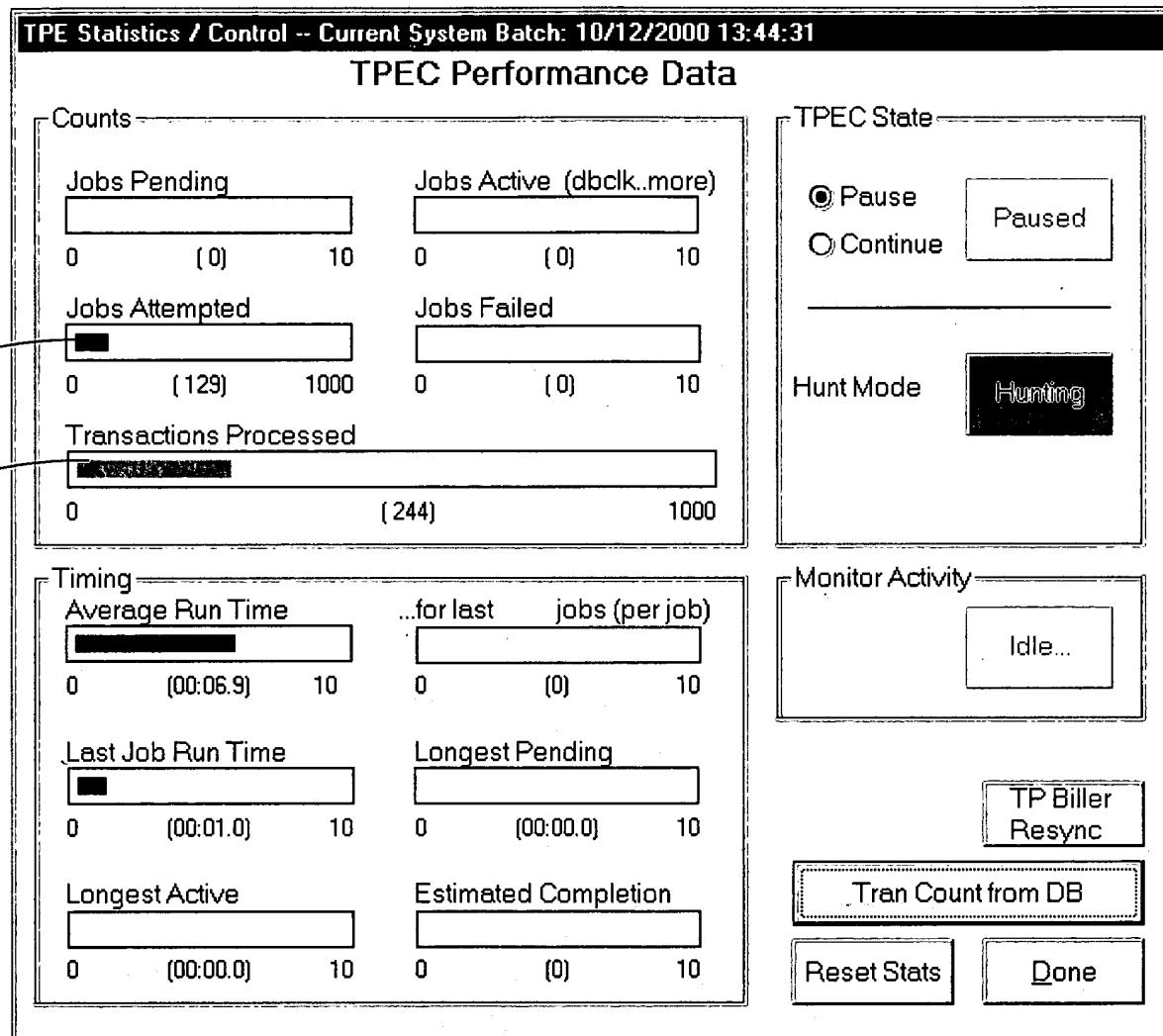


FIGURE 16

1600

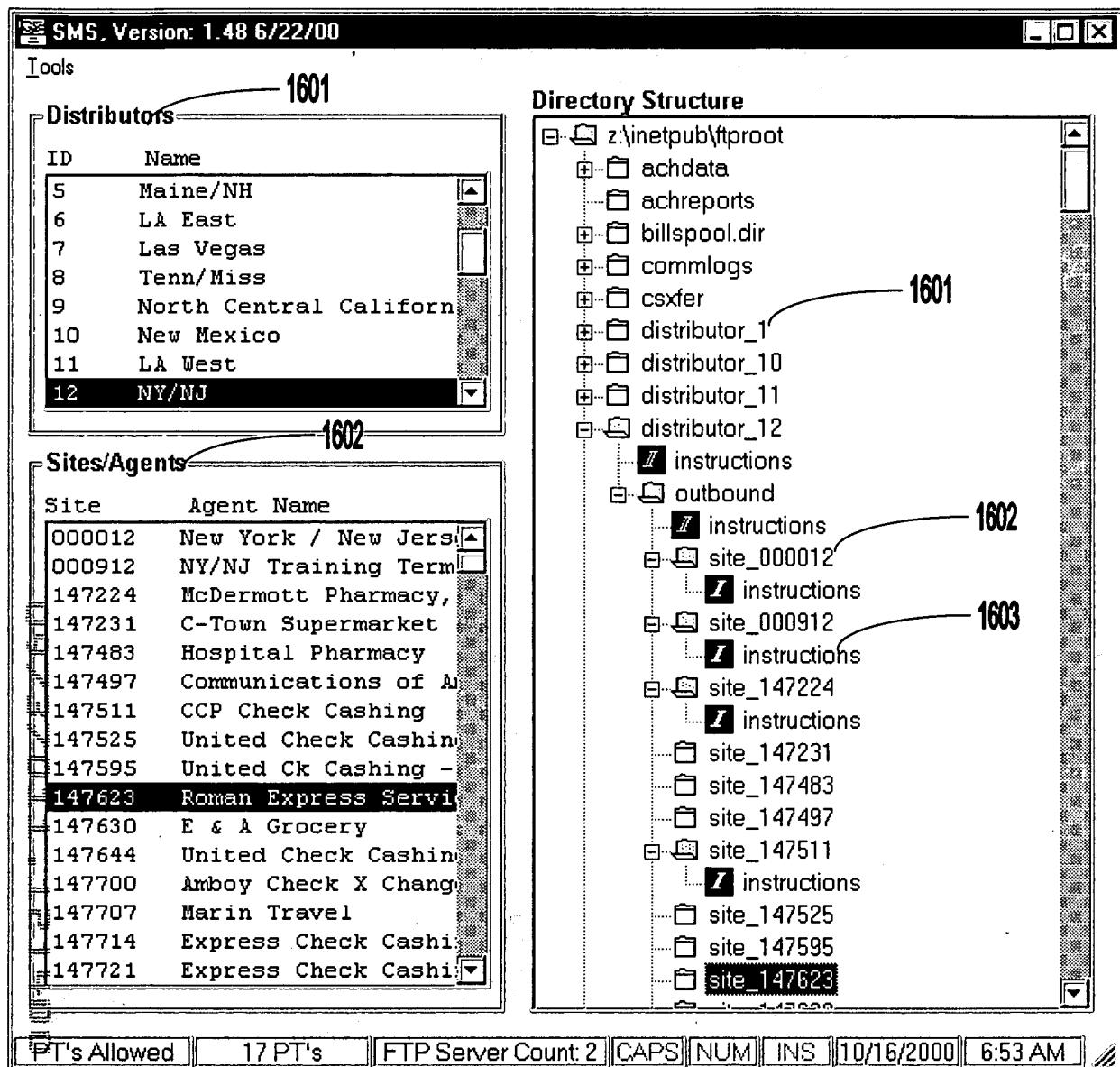


FIGURE 17

1700

End of Batch Manager, Version: 1.42d-branch 8/14/00

System Batch: 1701
Current Batch:
Next Batch: Hold Rollover Now
Time Left:

The CS is collecting jobs, waiting for the next rollover to occur.

1701

Manual Edit Counts
Closed Batch: Move pending manual edits to the next Batch
Open Batch:

Consolidation
Phase:
Table:

Reporting
Report: Skip

Trimming
Phase:
Table:

Archiving

Check Printing
Checks left to print:

Override

Digitized by srujanika@gmail.com

FIGURE 18

ETI, Version: 2.30-dev 8/15/00

Input Data		Edit Configuration																																																																																															
<table border="1"> <thead> <tr> <th>System Batch Number</th> <th>Partners in selected system batch</th> <th>Transaction Count</th> <th>Total Amount</th> <th>Holiday Skip</th> </tr> </thead> <tbody> <tr><td>2000/09/27 13:04:00</td><td>Bell Atlantic, NJ</td><td>8</td><td>1,226.58</td><td></td></tr> <tr><td>2000/09/28 13:09:17</td><td>CitiBank</td><td>26</td><td>3,865.72</td><td></td></tr> <tr><td>2000/09/29 13:17:45</td><td>EDP (Central Maine Power)</td><td>0</td><td>0.00</td><td></td></tr> <tr><td>2000/10/02 11:46:12</td><td>MCRPS</td><td>416</td><td>17,967.98</td><td></td></tr> <tr><td>2000/10/03 13:02:50</td><td>PNM</td><td>44</td><td>2,084.31</td><td></td></tr> <tr><td>2000/10/04 13:33:57</td><td>USWest</td><td>41</td><td>2,558.86</td><td></td></tr> <tr><td>2000/10/05 13:38:12</td><td></td><td></td><td></td><td></td></tr> <tr><td>2000/10/06 13:39:37</td><td></td><td></td><td></td><td></td></tr> <tr><td>2000/10/09 13:07:15</td><td></td><td></td><td></td><td></td></tr> <tr><td>2000/10/10 12:45:51</td><td></td><td></td><td></td><td></td></tr> <tr><td>2000/10/11 13:35:09</td><td></td><td></td><td></td><td></td></tr> <tr><td>2000/10/12 13:44:31</td><td></td><td></td><td></td><td></td></tr> </tbody> </table>		System Batch Number	Partners in selected system batch	Transaction Count	Total Amount	Holiday Skip	2000/09/27 13:04:00	Bell Atlantic, NJ	8	1,226.58		2000/09/28 13:09:17	CitiBank	26	3,865.72		2000/09/29 13:17:45	EDP (Central Maine Power)	0	0.00		2000/10/02 11:46:12	MCRPS	416	17,967.98		2000/10/03 13:02:50	PNM	44	2,084.31		2000/10/04 13:33:57	USWest	41	2,558.86		2000/10/05 13:38:12					2000/10/06 13:39:37					2000/10/09 13:07:15					2000/10/10 12:45:51					2000/10/11 13:35:09					2000/10/12 13:44:31					<input type="button" value="Edit Electronic Trading Partner Details"/> <input type="button" value="UnGrey Create"/> <input type="button" value="Map Biller to Electronic Trading / Memo Posting Partner"/>																														
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<input type="button" value="Refresh"/> <input checked="" type="checkbox" value="Show Currently Disabled Partners As Well"/> <input type="button" value="Create New Electronic Batch"/>		<input type="checkbox"/> Hide Completed Batches <input type="checkbox"/> Hide Deleted Batches <input type="button" value="Search Back Days: [10]"/>																																																																																															
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2000/10/11 13:35:09	2000/10/11 13:35:09	002211	Complete	USWest Memo ...	554.49	Memo Pos...	2000/10/11 15:16:25	2000/10/11 15:16																																																																																									
2000/10/11 13:35:09	2000/10/11 13:35:09	002212	Complete	USWest Memo ...	1,055.45	Memo Pos...	2000/10/12 02:46:26	2000/10/12 02:46																																																																																									
2000/10/11 13:35:09	2000/10/11 13:35:09	002213	Complete	USWest	2,558.86	2000/10/12...	2000/10/12 14:19:04	2000/10/12 14:30																																																																																									
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Selected: (none)		<input type="button" value="Delete"/> <input type="button" value="Queue"/> <input type="button" value="Retry"/>																																																																																															
		<input type="button" value="Report"/> <input checked="" type="checkbox" value="Gen. Report on Completion"/> <input type="button" value="Response File Reports"/>																																																																																															

FIGURE 19

Electronic Transaction Detail -- 10/11/2000 13:35:09 -- MCRPS -- Total: 17,967.98					
BillrName	BatchNumber	CandTBatchID	CandTID	Account Number	Amount
Pacific Bell**Van Nuys	10/11/2000 14:27:13	14756020001011142713	67	323355413925	28.92
Gas Company	10/11/2000 14:28:57	14942920001011140848	38	04142597006	62.74
Gas Company	10/11/2000 14:30:57	15169020001011143057	30	09212229000	52.57
Gas Company	10/11/2000 14:30:57	15169020001011143057	31	10472233278	22.09
Pacific Bell**Van Nuys	10/11/2000 14:32:27	1513320001011141214	37	323343487096	83.51
Pacific Bell**Van Nuys	10/11/2000 14:32:27	1513320001011141214	38	3233330153356	16.47
Pacific Bell**Van Nuys	10/11/2000 14:32:27	1513320001011141214	39	323345545400	43.11
Pacific Bell**Van Nuys	10/11/2000 14:37:08	15116520001011143708	23	323721301775	26.15
Verizon**PO 30001	10/11/2000 14:37:08	15116520001011143708	24	012663119714133204	16.51
Gas Company	10/11/2000 14:39:13	14942920001011143913	39	13792569355	19.69
Gas Company	10/11/2000 14:39:13	14942920001011143913	41	11872356669	14.87
Gas Company	10/11/2000 14:41:13	15241120001011130043	30	18460075338	25.92
Pacific Bell**Van Nuys	10/11/2000 14:41:13	15241120001011130043	31	3233664941063	23.30
Pacific Bell**Van Nuys	10/11/2000 14:41:31	15279620001011144131	26	7149721087141	134.83
Pacific Bell**Van Nuys	10/11/2000 14:41:31	15279620001011144131	27	7145422082046	78.45
Pacific Bell**Van Nuys	10/11/2000 14:41:31	15279620001011144131	28	7146670583861	34.92
Pacific Bell**Van Nuys	10/11/2000 14:42:52	1513320001011141214	40	323354980440	59.21
Gas Company	10/11/2000 14:48:05	15206120001011144805	29	04980034310	5.89
Pacific Bell**Van Nuys	10/11/2000 14:48:05	15206120001011144805	28	3233222330254	27.25
Pacific Bell**Van Nuys	10/11/2000 14:48:05	15206120001011144805	30	323346559956	170.62
Edison Company**Box 600	10/11/2000 14:50:57	15241120001011145057	40	145310983	17.98
Gas Company	10/11/2000 14:50:57	15241120001011144113	32	15810083004	9.45
Gas Company	10/11/2000 14:50:57	15241120001011145057	35	16150075766	51.70
Gas Company	10/11/2000 14:50:57	15241120001011145057	37	11100103701	47.93
Gas Company	10/11/2000 14:50:57	15241120001011145057	41	02350083008	15.25
LA Municipal Services**Box 10324	10/11/2000 14:50:57	15241120001011145057	39	1089762100760009002501	137.22
Pacific Bell**Van Nuys	10/11/2000 14:50:57	15241120001011144113	33	323835923416	30.67
Pacific Bell**Van Nuys	10/11/2000 14:50:57	15241120001011145057	36	3237525463426	29.25

Close

2000

FIGURE 20

Map Biller to Partner		Electronic Partner			
BillerID	BillerName	Cash Payment Method	Electronic Trading Partner	Memo Posting Partner	
00111	Verizon**PO 30001	Electronic	MCRPS	USWest Memo Postings	
00112	US West Communications**Phoenix	Electronic	USWest	Citibank (inactive)	
00130	Salt River Project	Electronic	Citibank	Citibank	
00134	Discover Private Issue**Box 7061	Electronic	MCRPS	Citibank (inactive)	
00140	Pacific Bell**Van Nuys	Electronic	Citibank	CMP (Central Maine Pow...	
00145	APS	Electronic	MCRPS	Citibank (inactive)	
00148	Central Maine Power	Electronic	Citibank	Citibank	
00160	American Express**Bx 28853, NY,NY	Electronic	MCRPS	MCRPS	
00161	Con Edison**PO 1702	Electronic	Citibank	Citibank	
00173	Gas Company	Electronic	Citibank	Bell Atlantic, NJ	
00180	Edison Company**Box 600	Electronic	Citibank	Citibank	
00187	Northern Utilities, Inc** PO 4320	Electronic	Citibank	Citibank	
00190	Verizon**PO 4830	Electronic	Citibank	Citibank	
00191	PSE&G**NJ	Electronic	Citibank	Citibank	
00198	Discover Card**1730 South	Electronic	Citibank	Citibank	
00201	Tekaco**Tampa	Electronic	Citibank	Citibank	
00209	Cablevision of NYC**Soundview Av	Electronic	Citibank	Citibank	
00228	AT&T Universal Card Services**Columbus	Electronic	Citibank	Citibank	
00256	PG&E**Embarcadero Drive	Electronic	Citibank	Citibank	
00261	Sprint **PO 52243	Electronic	Citibank	Citibank	
00266	Cablevision of Long Island	Electronic	Citibank	Citibank	
00268	PNM Electric & Gas Services	Electronic	Citibank	Citibank	
00279	Sprint **PO 650270	Electronic	Citibank	Citibank	
00285	LA Municipal Services**Box 10324	Electronic	MCRPS	MCRPS	
00290	Bell Atlantic**28007	Electronic	Citibank	Citibank	
00304	Sprint **PO 52243	Electronic	Citibank	Citibank	
00316	Pacific Bell **Sacramento	Electronic	MCRPS	MCRPS	
00348	Discover Card** Box 105430	Electronic	Citibank	Citibank	
00362	American Express**Los Angeles	Electronic	Citibank (inactive)	Citibank (inactive)	

Electronic Partner

Memo Posting Ptnr.

Buttons:

- Activate
- Inactivate
- Edit Map
- Change
- Electronic
- Manual
- Change
- Clear
- Edit Biller ACH Details
- Close

Selected: 00100 - NorthEast Power and Light

FIGURE 21